

CALIFORNIA FISH AND GAME COMMISSION NOTICE OF FINDINGS

NOTICE IS HEREBY GIVEN that, pursuant to the provisions of Fish and Game Code Section 2074.2, the California Fish and Game Commission, at its October 22, 2004, meeting in Concord, rejected the petition (Petition 2004) filed by the Center for Biological Diversity to list the California tiger salamander (*Amyxstoma californiense*) as an endangered species based on a finding that the petition did not provide sufficient information to indicate that the petition action may be warranted. At this meeting, the Commission also announced its intention to ratify its finding at its December 2, 2004, meeting in Monterey.

NOTICE IS ALSO GIVEN that, at its December 2, 2004, formal meeting in Monterey, the Commission adopted the following formal findings outlining the reasons for the rejection of the petition.

I

BACKGROUND

On July 5, 2001, the Center for Biological Diversity, et al. submitted a petition (Petition 2001) to list the California tiger salamander (CTS) as an endangered species and requested that the Commission take emergency action pursuant to Section 2076.5 of the Fish and Game Code to list the CTS as an endangered species for an emergency listing. The Commission, at its August 3, 2001, meeting in Sacramento, considered and denied this request. The Commission's findings were:

1. There was insufficient information to indicate that there was any emergency posing a significant threat to the continued existence of the species;
2. There was insufficient evidence to suggest that an emergency regulation was necessary for the immediate conservation, preservation or protection of the CTS; and
3. The Commission directed the Department to thoroughly review the petition to list the CTS as an endangered species as required in sections 2072.3 and 2073.5 of the Fish and Game Code, and to report to the Commission if at any time during the review process it believes that emergency action is warranted.

The Department completed its evaluation and the Commission, at its December 7, 2001, meeting in Long Beach, considered the petition, the Department's initial review and recommendation, and public comments. At that meeting the Commission rejected the petition and made a finding that the "petition contained insufficient information that the petitioned action may be warranted." The Commission ratified those findings at its February 8, 2002, meeting in Sacramento.

On January 30, 2004, the Center for Biological Diversity, et al., submitted a revised petition (Petition 2004) to list the CTS as an endangered species. Pursuant to Section 2073.5 of the Fish and Game Code, the petition was forwarded to the Department of Fish and Game for its review.

II

STATUTORY REQUIREMENTS

A species is endangered under California Endangered Species Act, Fish and Game Code Section 2050 et seq. (CESA), if it "is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, over exploitation, predation, competition, or disease." (Fish & G. Code, § 2062.) A species is threatened under CESA if it is "not presently threatened with extinction [but] is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by [CESA]..." (Fish & G. Code, § 2067.) The responsibility for deciding whether a species should be listed as endangered or threatened rests with the Fish and Game Commission (Commission). (Fish & G. Code, § 2070.)

California law does not define what constitutes a "serious danger" to a species, nor does it describe what constitutes a "significant portion" of a species' range. The Commission makes the determination as to whether a species currently faces a serious danger of extinction throughout a significant portion of its range, (or for a listing as threatened whether such a future threat is likely) on a case-by-case basis after evaluating and weighing all the biological and management information before it. This approach is consistent with the process followed by federal agencies in deciding whether to list species under the Federal Endangered Species Act, 16 U.S.C. § 1531 et seq.

Non-emergency listings involve a two-step process: first, the Commission "accepts" a petition to list the species, which immediately triggers regulatory protections for the species as a candidate for listing and also triggers a year-long study by the Department of Fish and Game (Department) of the species' status (Fish & G. Code, §§ 2074.2, 2074.6, and 2084); second, the Commission considers the Department's status report and information provided by other parties and makes a final decision to formally list the species as endangered or threatened (Fish & G. Code, § 2075.5).

To be accepted by the Commission, a petition to list a species under CESA must include sufficient scientific information that the listing may be warranted. (Fish & G. Code, § 2072.3, Cal. Code Regs., tit. 14, § 670.1, subds. (d) and (e).) The petition must also include information regarding the species' population trend, range, distribution, abundance and life history; factors affecting the species' ability to survive and reproduce; the degree and immediacy of the threat to the species; the impact of existing management efforts; suggestions for future management of the species; the availability and sources of information about the species; information about the kind of habitat necessary for survival of the species; and a detailed distribution map. (Fish & G. Code, § 2072.3, Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1).) In deciding whether it has sufficient information to indicate the petitioned listing may be warranted, the Commission is required to consider the petition itself, the Department of Fish and Game's written evaluation report, and other comments received about the petitioned action. (Fish & G. Code, § 2074.2.)

The requisite standard of proof to be used by the Commission in deciding whether listing may be warranted (i.e. whether to accept or reject a petition) was described in *Natural Resources Defense Council v. Fish and Game Commission* (1994) 28 Cal.App.4th 1104. In the *NRDC* case, the court determined that "the section 2074.2 phrase 'petition provides sufficient information to indicate that the petitioned action may be warranted' means that amount of information, when considered in light of the Department's written report and the comments received, that would lead a reasonable person to conclude there is a substantial possibility the requested listing could occur..." (*NRDC*, supra, 28 Cal. App. 4th at page 1125.) This

"substantial possibility" standard is more demanding than the low "reasonable possibility" or "fair argument" standard found in the California Environmental Quality Act, but is lower than the legal standard for a preliminary injunction, which would require the Commission to determine that a listing is "more likely than not" to occur. (Ibid.)

The *NRDC* court noted that this "substantial possibility" standard involves an exercise of the Commission's discretion and a weighing of evidence for and against listing, in contrast to the fair argument standard that examines evidence on only one side of the issue. (*NRDC*, supra, 28 Cal. App. 4th at page 1125.) As the Court concluded, the decision-making process involves:

...a taking of evidence for and against listing in a public quasi-adjudicatory setting, a weighing of that evidence, and a Commission discretion to determine essentially a question of fact based on that evidence. This process, in other words, contemplates a meaningful opportunity to present evidence contrary to the petition and a meaningful consideration of that evidence." (Id. at 1126.)

Therefore, in determining whether listing "may be warranted," the Commission must consider not only the petition and the report prepared on the petition by the Department, but other evidence introduced in the proceedings. The Commission must decide this question in light of the entire record.

III REASON FOR FINDING

This statement of reasons for the finding sets forth an explanation of the basis for the Commission's finding and its rejection of the petition to list the CTS as an endangered species. It is not a comprehensive review of all information considered by the Commission and for the most part does not address evidence that, while relevant to the proposed listing, was not at issue in the Commission's decision.

In order to accept this petition, the Commission is required to determine that it has information to persuade a reasonable person that there is a substantial possibility that the CTS will be listed. As the decision in the *NRDC* case makes clear, the Commission must critically evaluate and weigh all evidence, and this process does not allow the Commission to resolve all uncertainties in favor of either the proponents or opponents of the listing. The Commission may deal with data gaps by drawing inferences based on available information or by relying on expert opinion that the Commission finds persuasive, but in the end the petition and other information presented to the Commission must affirmatively demonstrate the species meets the criteria for protection as a candidate species.

Fish and Game Code Section 2072.3 provides there are several factors to be considered in determining whether a petition should be accepted. The informational deficiencies and factors of Section 2072.3 most relevant to this finding are again:

- (1) Population trend;
- (2) Population abundance; and
- (3) The degree and immediacy of threat.

1. **Population trend:**

As noted in Petition 2004, Petition 2001 indicated that historically, the CTS was found throughout large portions of the Central Valley of California from the southern San Joaquin Valley into the southern Sacramento Valley north of the Sacramento River Delta. The species was also found in the lower foothills along the eastern side of the Central Valley and in the foothills of the Coast Range. The species' historic range followed the low elevation grassland-oak woodland plant communities of the valleys and foothills. Petition 2004 also indicated that within this very large area, it is presumed that the CTS generally occurred wherever suitable habitat was present, with some limited exceptions. No information or analysis to support this alleged correlation was provided to the Commission, however. As in Petition 2001, Petition 2004 and available public comments also provide insufficient information on population trends for the CTS. The current petition cites Shaffer, et al. (1993), Jennings and Hayes (1994), and Davidson, et al. (2002) for the proposition that the CTS population has dramatically declined. Unfortunately, these reports only surveyed a very limited portion of the CTS's total range.

As in Petition 2001, Petition 2004 again erroneously relies almost exclusively on the Shaffer, et al. (1993) report for its evaluation of the range-wide status of the CTS. As noted in 2001, the Shaffer study's primary objective was to collect genetic material, not to validate the extent of the CTS range. Also, the study did not comply with the Department's protocol for species specific population studies. The study utilized sampling methods that tested for CTS larvae in a breeding pond only once during a given year. While this method of data collection was well suited for the primary objective of the Shaffer study, i.e., collecting samples of genetic material, it is a questionable technique for a valid population assessment of a species like the CTS that is often not detected in a single visit, even in high quality habitat known to be occupied. This type of sampling has been described as producing more false negatives than other methods. Because the Shaffer study's sampling procedures have a high bias toward absence which is not accounted for in its data analysis, the Petition 2004 provides a species population status report that is potentially inaccurate and misleading. The best available data for range-wide status assessment is the information provided the Commission at the hearing from survey reports and environmental documents detailing the distribution and status of the CTS, especially those based on the work of biologists who performed multiple visit surveys. This information provides credible evidence that the CTS population trend is not necessarily declining; and, therefore, is not endangered throughout all or a significant portion of its range.

While the Petition 2004 argues that California is undergoing a loss of "native" habitat for the CTS through loss of vernal pools and other similar wetlands, as noted earlier the petition fails to provide any credible information or evidence that the CTS either presently, or historically, occupies much of this hypothetical or presumptive habitat. Based on only several rough criteria involving the existence of seasonal wetlands and an associated/adjacent upland, the petition extrapolates the existence of hundreds of thousands of acres of historical CTS habitat within California. The petition then proceeds to argue that unspecified developmental projects and other activities within this presumptive area of "habitat" are adversely impacting such habitat. Again, little or no evidence was presented by petitioners actually correlating the existence of the CTS within the majority of this so-called habitat, or more specifically, within the actual "habitat" allegedly being impacted. A clear example of this correlation problem was presented by the petition in its reference to man-made stockponds as breeding habitat

for the CTS. The petition points out that man-made stockponds are important habitat for survival of the CTS. The petitioners agree that the CTS adapts easily to the use of the stockponds as breeding habitat. However, the Petition 2004 again fails to analyze the degree to which habitat provided by stockponds offsets the hypothesized loss of natural breeding pools because insufficient information was presented as to actual loss of known breeding habitat, actual gains in breeding habitat from the addition of stockponds, and actual use of either habitat type by the CTS. Population trend arguments made only on land use trend information are justifiably unpersuasive without significant efforts to correlate the presence of the CTS on the lands undergoing a change in use.

2. **Population abundance:**

The petition provides **no** actual data on CTS population abundance. Instead, the petition claims that, based on the massive documented decrease in the potential habitat of the CTS, it is obvious that the average overall population must have also declined. It also states that there are difficulties involved in estimating population numbers for a species like the CTS. The petition indicates that because amphibian populations naturally undergo large fluctuations in population size as a result of environmental conditions such as rainfall and fire, it would be difficult, if not impossible, to obtain accurate population counts. While anecdotal information can be important, for example in helping identify a species' range, it cannot be used to accurately establish abundance or population trends. Because of this deficiency estimates of historic abundance of CTS as well as trend figures are fraught with uncertainty and, in the Commission's view, are unreliable. Without an accurate assessment of the historic or current population of a species, any determination of threat to the species would be just speculation at best.

The petitioners stress that it is more important to note that, in general, the number of CTS must have been drastically reduced due to the fact that the species cannot now be found in much of its hypothetical range and appears pushed into narrow bands of habitat. However, the Petition 2004 does not provide sufficient scientific information related to the actual abundance of the CTS. There is currently no sufficient estimate of population abundance for the species as a whole, nor is there an adequate estimate of historical population abundance. Without an accurate assessment of the current population abundance of a species, it is difficult, if not impossible, to establish population trends for that species, and any determination of threat to the species is purely guesswork.

In noting these deficiencies, the Commission acknowledges that data for use in listing decisions is never complete. Historical data in particular is unavailable for many species, and a lack of historical data cannot be used by surveys or studies at the time the petition is prepared. For those reasons, gaps in information are not necessarily fatal to a petition to list a species, provided the Commission at this point in the process can discern, despite the factual uncertainties, a substantial possibility that the species is in serious danger of extinction.

With the CTS, the gaps in information are very significant. This lack of information makes it difficult for the Commission to conclude there is a substantial possibility that the CTS would ultimately be listed if it were accepted as a candidate species.

The petition downplays the significance of absence of population data by focusing instead on the threats facing the CTS of "loss of habitat". While habitat loss can often be an indicator of population declines and threat to the species, this petition's information about habitat loss was not compelling enough to overcome the other deficiencies in the data and analysis presented by the petitioners. The evidence in Petition 2004 of supposed habitat loss alone, given the other deficiencies described in these findings, is not sufficient for the Commission to reach the conclusion that the petitioned action may be warranted. With some effort on the part of the petitioners, there are a number of surveys and methodologies available that could provide more accurate scientific information on abundance and population trends of the CTS.

The Petition 2004 identified only 486 CTS localities or sites where CTS are known to exist in the central California area (plus a few additional localities in Sonoma and Santa Barbara counties). In the U.S. Fish and Wildlife Service's final rule, it found there were 711 localities. However, the best available information provided to the Commission, shows that as of March 2004, there are 828 known CTS localities, including 753 in the California Natural Diversity Database. Both the Department of Fish and Game and the Petitioners downplay the fact that the record shows an increasing number of CTS sites (almost 40 percent increase) arguing that the increases in site identification are an artifact of increased survey effort and not increasing population. While this may be so, the increase in identified localities or sites may also reflect a larger than expected population, or an increase in the population.

Fish and Game Code Section 2072.3 clearly states that the petition must provide information about species' abundance. This petition clearly is deficient in providing sufficient scientific information on both the historic abundance, as well as current abundance of the CTS.

3. The degree and immediacy of threat:

The problems caused by the current petition's lack of population abundance and trend information are compounded within the petition's discussion of purported threats to the CTS. Without an estimate of population, no realistic assessment of the scope of the threat to the species is possible. The Petition 2004 also fails to state clearly the effects of not listing the CTS. Most listings of other species by the Commission were clearly documented by utilizing population size to show dramatic and measurable declines in population caused by the lack of protections. Some listings of species looked to small population size initially to show the need for immediate protection of the species.

The primary threat claimed in this petition is CTS habitat destruction from conversion of areas suitable for CTS habitat to urban and agricultural lands. Instead of demonstrating actual threats to the survival of the CTS, or to known CTS habitat, the petitioners list a series of projects that they say may have impacts to CTS survival. There are no numbers, no facts and no actual demonstration of harm, much less a threat to survival of the species in the listing of the projects. The petition only offers vague generalities about the scale of the threat to the CTS, with no indication of how the species would be impacted.

This analysis is also flawed because no attempt was made to correlate any possible project sites with potential CTS habitat, much less where CTS presence has been documented. It appears that the petitioners simply assume that any project in any city or

county in which the CTS has been found to exist will destroy CTS habitat and, by implication, the CTS.

Fish and Game Code Section 2072.3 explicitly requires the presentation of sufficient credible information on the questions of degree and immediacy of threat and the impact of existing management efforts. Section 2072.3 provides that "Petitions shall include information regarding...the degree and immediacy of threat, the impact of existing management efforts..." The Petition 2004 lacks sufficient information on both of these components of the statute under current conditions. Since the Petition 2004 was submitted to the Commission, the USFWS has issued its Final Rule listing the CTS as threatened throughout its range. This Final Rule also contains a Special Rule under Section 4(d) of the ESA to allow for incidental take of the CTS resulting from routine ranching activities located on private or tribal lands. Therefore, the information in the Petition 2004 regarding the amount of existing regulatory protection and management programs in place to protect the CTS is outdated and incomplete. Significant changes have been made with respect to the existing management programs; and therefore, the immediacy of threat.

The Commission finds that the federal listing, other federally listed species with overlapping critical habitat (e.g. California red-legged frog and vernal pool crustaceans and plants), recently approved Habitat Conservation Plans for Natomas, Kern Water Bank and San Joaquin County, the Federal Clean Water Act, California's Porter-Cologne Act and California Environmental Quality Act (CTS is still a "species of concern") have the effect of reducing threats to CTS. The Commission, therefore, concludes that existing regulatory mechanisms further support the finding that there is not sufficient information to indicate that the petition may be warranted.

IV FINAL DETERMINATION BY COMMISSION

The Commission has weighed all the scientific and general evidence in the petition, the Department's written report, and written and oral comments received from numerous members of the public, and, based upon that weighing of the evidence, the Commission has determined that, although there may be some reason for concern, the petition provides insufficient evidence to persuade the Commission that the petitioned action may be warranted (Fish and Game Code Section 2074.2). In making this determination the Commission finds that the petition does not provide sufficient information in the categories of population trend, abundance, and degree and immediacy of threat to find that the petitioned action may be warranted. In weighing the evidence, the Commission further finds that any threat to the CTS in California has been reduced by the existing regulatory protections. The Commission also finds that there is little evidence of "present or threatened modification or destruction of the CTS's habitat", in part for the reasons enunciated earlier herein and, also in part, because the federal listing has reduced such a threat. The petition fails to adequately, address the increase in actual locality sites, the federal listing, including the Section 4(d) rule, and other state and federal laws which provides protection; and therefore, does not provide sufficient information range-wide regarding populations trends and abundance and immediacy of threat for the Commission to adequately assess the threat and conclude that there was a substantial possibility that the species will qualify for listing.

Fish and Game Commission

Dated: December 2, 2004

Robert R. Treanor
Executive Director